Physica C 214 (1993) 435–438
North-Holland

PHYSICA C

Author Index to Volume 214

Abaliosheva, I.S., see P.N. Mikheenko **214**, 393
Abrikosov, A.A., J.C. Campuzano and K. Gofron, Experimentally observed extended saddle point singularity in the energy spectrum of $YBa_2Cu_3O_{6.9}$ and $YBa_2Cu_4O_8$ and some of the consequences **214**, 73
Abrikosov, A.A., Influence of the gap anisotropy on superconducting properties **214**, 107
Acha, C., see P. Levy **214**, 111
Adachi, S., A. Tokiwa-Yamamoto, M. Itoh, K. Isawa and H. Yamauchi, Annealing effects on the Meissner signals from Hg–Ba–Ca–Cu–O superconductors **214**, 313
Anczykowski, B., see H.M. Appelboom **214**, 323
Andersen, J.N., see M. Qvarford **214**, 119
Andersen, J.V., N.H. Andersen, O.G. Mouritsen and H.F. Poulsen, Effects of Co, Fe, and Al doping on the oxygen disordering and superconducting transition temperature of $YBa_2Cu_3O_{6+x}$ **214**, 143
Andersen, N.H., see J.V. Andersen **214**, 143
Appelboom, H.M., V.C. Matijasevic, F. Mathu, G. Rietveld, B. Anczykowski, W.J.A.M. Peterse, F. Tuinstra, J.E. Mooij, W.G. Sloof, H.A. Rijken, S.S. Klein and L.J. Van IJzendoorn, Sm–Ba–Cu–O films grown at low temperature and pressure **214**, 323
Asaf, U., see I. Felner **214**, 169
Azami, M. and T. Matsuura, The localized excited state in a superconductor due to magnetic impurity **214**, 385

Bakker, S.J.M., see T.G.M. Oosterlaken **214**, 359
Baudenbacher, F., see K. Hirata **214**, 272
Bäuerle, D., see P. Schwab **214**, 257
Bayya, S.S. and R.L. Snyder, Synthesis of thallium superconducting phases via melt quenching **214**, 25
Bazhenov, A.V., K.B. Rezchikov, T.N. Fursova, A.A. Zakharov and M.B. Tsetlin, Infrared spectra of optical phonons in semiconducting La_2CuO_{4+x} single crystals **214**, 45
Bekeris, V., see P. Levy **214**, 111
Blanc-Guilhon, B., see J.F. Hamet **214**, 55
Boothroyd, A.T., see C.K. Chen **214**, 231
Boulesteix, C., see A. Rosová **214**, 247

Campbell, A.M., see A. Porch **214**, 350
Campuzano, J.C., see A.A. Abrikosov **214**, 73
Cantoni, M., see T. Kroener **214**, 1
Chan, I.N., see Y.Q. Tang **214**, 190
Chen, C.K., A.T. Boothroyd, Y. Hu, F.R. Wondre, B.M. Wanklyn and J.W. Hodby, Phase diagram studies and crystal growth of $PrBa_2Cu_3O_{7-y}$ **214**, 231
Chen, F., see R.L. Meng **214**, 307
Chen, L.Q., see W.L. Zhou **214**, 19
Chen, Z.Y., see Y.Q. Tang **214**, 190
Chow, J.C.L., see G.J. Shen **214**, 426
Chu, C.W., see R.L. Meng **214**, 307
Cichorek, T., see Z. Henkie **214**, 138
Cooper, J.R., see A. Porch **214**, 350
Currie, D.B. and M.T. Weller, The crystal structures of $LnBa_2Cu_4O_8$ and $LnBa_2Cu_3O_{7-\delta}$ (Ln=Er, Ho, Dy) A high resolution powder neutron diffraction study **214**, 204

Däumling, M., G. Triscone and R. Flükiger, Critical currents in $(Bi,Pb)_2Sr_2Ca_2Cu_3O_x$ powder **214**, 403
Desfeux, R., see G. Poullain **214**, 195
Dolata, R., M. Neuhaus and W. Jutzi, Laser reflection measurements for end point detection and analysis in Nb/Al_2O_3–Al/Nb Josephson circuit fabrication **214**, 365
Drulis, H., see Z. Henkie **214**, 138
Dyomin, A.V., see V.A. Khlus **214**, 413

Emel'chenko, G.A., see A.N. Maljuk **214**, 93
Enz, C.P. and Z.M. Galasiewicz, The T_c–n_s relation for weakly interacting charged Bose fluids **214**, 239

Fastampa, R., see E. Silva **214**, 175
Fedorov, V., see N. Naumov **214**, 291
Felner, I., U. Asaf, D. Hechel, U. Yaron and T. Kröner, Magnetic properties, specific heat studies and Mössbauer measurements of $PrBa_2NbCu_2O_8$ **214**, 169
Fernandez-Baca, J.A., see S. Katano **214**, 64
Ferrari, H., see P. Levy **214**, 111
Fietz, W.H., see J. Metzger **214**, 371
Finkbeiner, F., see S.P. Zhao **214**, 345
Flodström, S.A., see M. Qvarford **214**, 119
Flükiger, R., see M. Däumling **214**, 403
Freeman, A.J., see J.J. Yu **214**, 335
Freeman, P.A., see A. Porch **214**, 350
Funahashi, S., see S. Katano **214**, 64
Funakura, M., see A. Oota **214**, 9
Fung, K.K., see W.L. Zhou **214**, 19
Fursova, T.N., see A.V. Bazhenov **214**, 45

Galasiewicz, Z.M., see C.P. Enz **214**, 239
Giura, M., see E. Silva **214**, 175
Gofron, K., see A.A. Abrikosov **214**, 73
Gomeniuk, Yu.V., V.Z. Lozovski, V.S. Lysenko and I.P. Tyagulski, Critical currents in oxygen-implanted $YBa_2Cu_3O_{7-\delta}$ thin films under magnetic and electrostatic fields **214**, 127
Gopinath, C.S., S. Subramanian, M. Paranthaman and A.M. Hermann, Valence band electronic structure of the $Tl_{2-x-z}Ba_2Ca_{2+x}Cu_3O_{10-y}$ system **214**, 153

Grube, K., see J. Metzger **214**, 371
Guien, Z., see S. Lei **214**, 133

Hamet, J.F., B. Blanc-Guilhon, A. Taffin, B. Mercey, M. Hervieu and B. Raveau, Growth mechanism of ***a***-axis "123" thin films on $LaAlO_3$ without PBCO interface **214**, 55
Hechel, D., see I. Felner **214**, 169
Henkie, Z., T. Cichorek, H. Drulis and J. Klamut, Hydrogenation and deoxygenation effects on the thermoelectric power of $SmBa_2Cu_3O_7$ **214**, 138
Hermann, A.M., see C.S. Gopinath **214**, 153
Hervieu, M., see J.F. Hamet **214**, 55
Hervieu, M., see D. Pelloquin **214**, 87
Hiraga, K., see S. Nakajima **214**, 80
Hirata, K., F. Baudenbacher and H. Kinder, Initial stage of $YBa_2Cu_3O_{7-x}$ film growth on $SrTiO_3$ **214**, 272
Hodby, J.W., see C.K. Chen **214**, 231
Hong, Q. and J.H. Wang, Electrical transport properties of the rare-earth ion substituted (Tl, Ps)$Sr_{1.6}Ba_{0.4}(Ca_{0.8}R_{0.2})Cu_2O_x$ superconducting system **214**, 286
Hu, Y., see C.K. Chen **214**, 231
Huang, Z.J., see R.L. Meng **214**, 307

Ikeda, M.A., see M. Sugihara **214**, 159
Isawa, K., see S. Adachi **214**, 313
Itoh, M., see S. Adachi **214**, 313
Iwaya, J., see A. Oota **214**, 9

Jaeger, H.M., see T.G.M. Oosterlaken **214**, 359
Jaggi, A., see S.P. Zhao **214**, 345
Janssen, G.C.A.M., see T.G.M. Oosterlaken **214**, 359
Jutzi, W., see R. Dolata **214**, 365

Kao, H.-C.I., see T.P. Wei **214**, 179
Kao, H.-C.I., see D.S. Wu **214**, 261
Katano, S., J.A. Fernandez-Baca, S. Funahashi, N. Môri, Y. Ueda and K. Koga, Crystal structure and superconductivity of $La_{2-x}Ba_xCuO_4$ $(0.03 \leq x \leq 0.24)$ **214**, 64
Khlus, V.A., A.V. Dyomin and A.L. Zazunov, Resonant tunneling through a single localized state in a normal-metal–superconductor junction **214**, 413
Kikuchi, M., see S. Nakajima **214**, 80
Kikuchi, M., see E. Ohshima **214**, 182
Kikuchi, Y., see M. Sugihara **214**, 159
Kinder, H., see K. Hirata **214**, 272
Klamut, J., see Z. Henkie **214**, 138
Klein, S.S., see H.M. Appelboom **214**, 323
Kochemasov, A., see P. Schwab **214**, 257
Koga, K., see S. Katano **214**, 64
Koshizuka, N., see J. Sugiyama **214**, 316
Kotlyarov, Yu., see N. Naumov **214**, 291
Kroener, T., G. Linker, O. Meyer, S. Massing, B. Strehlau, M. Cantoni and H.-U. Nissen, 300 keV proton irradiation effects on structural properties of thin $RE_1Ba_2Cu_3O_{7-\delta}$ films **214**, 1
Kröner, T., see I. Felner **214**, 169
Kuiper, G.J., see T.G.M. Oosterlaken **214**, 359
Kulik, J., see R.L. Meng **214**, 307

Lam, C.C., see G.J. Shen **214**, 426
Leelaprute, S., see R. Suryanarayanan **214**, 277
Lei, S., L. Xiao-Guang, J. Yunbo, Z. Guien, R.L. Wang, C.A. Wang, H.R. Yi, H.C. Li and Z. Yuheng, X-ray study of in-plane epitaxy of $GdBa_2Cu_3O_{7-y}$ thin film on MgO(001) **214**, 133
Leonyuk, L., see M. Qvarford **214**, 119
Lerch, Ph., see S.P. Zhao **214**, 345
Leusink, G.J., see T.G.M. Oosterlaken **214**, 359
Levy, M., see G.Y. Meng **214**, 297
Levy, P., H. Ferrari, V. Bekeris and C. Acha, AC susceptibility and local intergranular magnetic field in high-T_c superconductors **214**, 111
Li, H.C., see S. Lei **214**, 133
Li, Y.F., see Y.Q. Tang **214**, 190
Lindau, I., see M. Qvarford **214**, 119
Linker, G., see T. Kroener **214**, 1
Lozovski, V.Z., see Yu.V. Gomeniuk **214**, 127
Ludwig, H.A., see J. Metzger **214**, 371
Lundgren, E., see M. Qvarford **214**, 119
Luo, W.A., see Y.Q. Tang **214**, 190
Lysenko, V.S., see Yu.V. Gomeniuk **214**, 127

Machi, T., see J. Sugiyama **214**, 316
Maignan, A., see D. Pelloquin **214**, 87
Maljuk, A.N., A.A. Zhokhov, G.A. Emel'chenko, I.I. Zver'kova, A.N. Turanov and V.Sh. Shekhatman, Cu-deficiency in $La_{2-x}Sr_xCu_{1-y}O_{4-\delta}$ single crystals and how it affects superconducting properties **214**, 93
Marcon, R., see E. Silva **214**, 175
Massidda, S., see J.J. Yu **214**, 335
Massing, S., see T. Kroener **214**, 1
Mathu, F., see H.M. Appelboom **214**, 323
Matijasevic, V.C., see H.M. Appelboom **214**, 323
Matsushita, T., On the origin of the irreversibility line in superconductors Depinning or melting of fluxoids **214**, 100
Matsuura, T., see M. Azami **214**, 385
Meng, G.Y., G. Zhou, R. Schneider, B.K. Sarma and M. Levy, Formation and characterization of $YBa_2Cu_3O_{7-\delta}$ high-T_c thin films by MOCVD with single mixed precursor **214**, 297
Meng, R.L., Y.Y. Sun, J. Kulik, Z.J. Huang, F. Chen, Y.Y. Xue and C.W. Chu, Superconductivity at 112–117 K in $HgBa_2CaCu_2O_{6+\delta}$ **214**, 307
Mercey, B., see J.F. Hamet **214**, 55
Metzger, J., T. Weber, W.H. Fietz, K. Grube, H.A. Ludwig, T. Wolf and H. Wühl, Separation of the intrinsic pressure effect on T_c of $YBa_2Cu_3O_{6.7}$ from a T_c enhancement caused by pressure-induced oxygen ordering **214**, 371
Meyer, O., see T. Kroener **214**, 1

Michel, C., see D. Pelloquin **214**, 87
Mikheenko, P.N. and I.S. Abaliosheva, Manifestation of two-dimensionality in the current–voltage characteristics of $YBa_2Cu_3O_x$ films **214**, 393
Mogro-Campero, A., L.G. Turner and L.A. Peluso, Search for changes of stoichiometry in $YBa_2Cu_3O_7$ thin films subjected to high current at 77 K **214**, 187
Mooij, J.E., see H.M. Appelboom **214**, 323
Môri, N., see S. Katano **214**, 64
Mouritsen, O.G., see J.V. Andersen **214**, 143
Murray, H., see G. Poullain **214**, 195

Nagase, K., see E. Ohshima **214**, 182
Nagoshi, M., see E. Ohshima **214**, 182
Nakajima, S., T. Oku, R. Suzuki, M. Kikuchi, K. Hiraga and Y. Syono, Chemical characterization and superconductivity of $Tl_2Ba_{2-x}La_xCuO_y$ with the orthorhombic and tetragonal structures **214**, 80
Nakajima, S., see E. Ohshima **214**, 182
Nakao, Y., see M. Sugihara **214**, 159
Naumov, N., Yu. Kotlyarov, P. Samoilov and V. Fedorov, Existence conditions, stability and solid solutions of the family of $Bi_2BaLnCuO_{6+\delta}$ cuprates with 2201-type structure **214**, 291
Neuhaus, M., see R. Dolata **214**, 365
Niarchos, D., see R. Suryanarayanan **214**, 277
Nissen, H.-U., see T. Kroener **214**, 1
Numai, K., see M. Sugihara **214**, 159
Nyholm, R., see M. Qvarford **214**, 119

Ohshima, E., M. Kikuchi, M. Nagoshi, R. Suzuki, S. Nakajima, K. Nagase and Y. Syono, Structure and superconductivity of $Tl_{0.5}Pb_{0.5}Sr_2CuO_y$ **214**, 182
Oku, T., see S. Nakajima **214**, 80
Oosterlaken, T.G.M., G.J. Leusink, G.J. Kuiper, S.J.M. Bakker, A.H. Verbruggen, H.M. Jaeger, G.C.A.M. Janssen and S. Radelaar, Resistivity and superconducting transition temperature of very thin amorphous tungsten–germanium films deposited by chemical vapour deposition **214**, 359
Oota, A., J. Iwaya, P. Songsak, T. Saigou and M. Funakura, Critical current density, morphology and microstructure of Ag-sheathed $(Bi, Pb)_2Sr_2Ca_2Cu_3O_x$ tapes **214**, 9
Ott, H.R., see S.P. Zhao **214**, 345

Paranthaman, M., see C.S. Gopinath **214**, 153
Pederson, D.O., see Y.Q. Tang **214**, 190
Pelloquin, D., C. Michel, G. Van Tendeloo, A. Maignan, M. Hervieu and B. Raveau, A new "1201" mercury cuprate The 27 K-superconductor $Hg_{0.5}Bi_{0.5}Sr_{2-x}La_xCuO_{5-\delta}$ **214**, 87
Peluso, L.A., see A. Mogro-Campero **214**, 187
Peterse, W.J.A.M., see H.M. Appelboom **214**, 323
Podloucky, R., see J.J. Yu **214**, 335
Porch, A., J.R. Cooper, D.N. Zheng, J.R. Waldram, A.M. Campbell and P.A. Freeman, Temperature dependent magnetic penetration depth of Co and Zn doped $YBa_2Cu_3O_7$ obtained from the AC susceptibility of magnetically aligned powders **214**, 350
Poullain, G., R. Desfeux and H. Murray, Conditions for in-situ growth of BiSrCaCuO thin films by laser deposition **214**, 195
Poulsen, H.F., see J.V. Andersen **214**, 143
Proyer, S., see P. Schwab **214**, 257

Qvarford, M., N.L. Saini, J.N. Andersen, R. Nyholm, E. Lundgren, I. Lindau, J.F. Van Acker, L. Leonyuk, S. Söderholm and S.A. Flodström, Polarisation-dependent X-ray absorption in high- and low-T_c $Bi_2Sr_2Ca_{n-1}Cu_nO_{4+2n}$ superconductors **214**, 119

Radelaar, S., see T.G.M. Oosterlaken **214**, 359
Raveau, B., see J.F. Hamet **214**, 55
Raveau, B., see D. Pelloquin **214**, 87
Rezchikov, K.B., see A.V. Bazhenov **214**, 45
Rietveld, G., see H.M. Appelboom **214**, 323
Rijken, H.A., see H.M. Appelboom **214**, 323
Rosová, A., C. Boulesteix and I. Vávra, Role of microtwins in twin lamella intersections and interconnections in $YBa_2Cu_3O_{7-y}$ **214**, 247
Routbort, J.L., Tracer diffusion of oxygen in $NdBa_2Cu_3O_{7-\delta}$ **214**, 408

Saigou, T., see A. Oota **214**, 9
Saini, N.L., see M. Qvarford **214**, 119
Samoilov, P., see N. Naumov **214**, 291
Sarma, B.K., see G.Y. Meng **214**, 297
Sarti, S., see E. Silva **214**, 175
Sato, H., see H.B. Zhang **214**, 265
Schneider, R., see G.Y. Meng **214**, 297
Schwab, P., X.Z. Wang, S. Proyer, A. Kochemasov and D. Bäuerle, Synthesis of $YBa_{2-x}Sr_xCu_3O_{7-\delta}$ by pulsed-laser deposition **214**, 257
Selke, W. and G.V. Uimin, Oxygen ordering in $YBa_2Cu_3O_z$ A Monte Carlo study **214**, 37
Shekhatman, V.Sh., see A.N. Maljuk **214**, 93
Shen, G.J., C.C. Lam, J.C.L. Chow and S.T. Tang, Twin formation due to irradiation of energetic electron beam in high-temperature superconductors of In- and Sb-doped YBCO **214**, 426
Sheng, Z.Z., see Y.Q. Tang **214**, 190
Silva, E., R. Marcon, R. Fastampa, M. Giura and S. Sarti, Magnetic 3D–2D crossover in $Bi_2Sr_2CaCu_2O_{8+x}$ **214**, 175
Sloof, W.G., see H.M. Appelboom **214**, 323
Snyder, R.L., see S.S. Bayya **214**, 25
Söderholm, S., see M. Qvarford **214**, 119
Songsak, P., see A. Oota **214**, 9
Strehlau, B., see T. Kroener **214**, 1
Subramanian, S., see C.S. Gopinath **214**, 153
Sugihara, M., K. Numai, Y. Nakao, Y. Kikuchi and M.A. Ikeda, Optical absorption of hole doped cuprate materials **214**, 159
Sugiyama, J., T. Machi, I. Tomeno, H. Yamauchi,

N. Koshizuka and H. Yasuoka, An NMR study of superconducting $Nd_2CuO_{3.8}F_{0.2}$ **214**, 316
Sun, Y.Y., see R.L. Meng **214**, 307
Suryanarayanan, R., S. Leelaprute and D. Niarchos, Irreversibility line of $Y_{1-x}Ca_xSrBaCu_{2.9}Co_{0.1}O_{6+z}$ $(0<x<0.25)$ A comparative study of DC magnetization and complex AC susceptibility **214**, 277
Suzuki, R., see S. Nakajima **214**, 80
Suzuki, R., see E. Ohshima **214**, 182
Syono, Y., see S. Nakajima **214**, 80
Syono, Y., see E. Ohshima **214**, 182

Taffin, A., see J.F. Hamet **214**, 55
Tang, S.T., see G.J. Shen **214**, 426
Tang, Y.Q., Z.Z. Sheng, W.A. Luo, I.N. Chan, Z.Y. Chen, Y.F. Li and D.O. Pederson, Phase transformation during low temperature Tl-diffusion in the fabrication of Tl–Ba–Ca–Cu–O thin films **214**, 190
Tateno, J., Coexistence of Anderson localization and small polarons in the normal phase of $La_{2-x}Sr_xCuO_4$ **214**, 377
Tokiwa-Yamamoto, A., see S. Adachi **214**, 313
Tomeno, I., see J. Sugiyama **214**, 316
Triscone, G., see M. Däumling **214**, 403
Tsetlin, M.B., see A.V. Bazhenov **214**, 45
Tuinstra, F., see H.M. Appelboom **214**, 323
Turanov, A.N., see A.N. Maljuk **214**, 93
Turner, L.G., see A. Mogro-Campero **214**, 187
Tyagulski, I.P., see Yu.V. Gomeniuk **214**, 127

Ueda, Y., see S. Katano **214**, 64
Uimin, G.V., see W. Selke **214**, 37

Van Acker, J.F., see M. Qvarford **214**, 119
Van IJzendoorn, L.J., see H.M. Appelboom **214**, 323
Van Tendeloo, G., see D. Pelloquin **214**, 87
Vávra, I., see A. Rosová **214**, 247
Verbruggen, A.H., see T.G.M. Oosterlaken **214**, 359

Waldram, J.R., see A. Porch **214**, 350
Wang, C.A., see S. Lei **214**, 133
Wang, C.M., see T.P. Wei **214**, 179
Wang, C.M., see D.S. Wu **214**, 261
Wang, J.H., see Q. Hong **214**, 286
Wang, R.L., see S. Lei **214**, 133
Wang, X.Z., see P. Schwab **214**, 257
Wanklyn, B.M., see C.K. Chen **214**, 231
Weber, T., see J. Metzger **214**, 371
Wei, T.P., C.M. Wang and H.-C.I. Kao, Qualitative study on the reaction of $Bi_{1.8}Pb_{0.4}Ca_2Sr_2Cu_3O_y$ superconductor with water **214**, 179
Weller, M.T., see D.B. Currie **214**, 204
Wolf, T., see J. Metzger **214**, 371
Wondre, F.R., see C.K. Chen **214**, 231
Wu, D.S., H.-C.I. Kao, M.K. Wu and C.M. Wang, Superconductivity of the single phase $La_{4-x}Ca_xBa_3Cu_7O_y$ system **214**, 261
Wu, M.K., see D.S. Wu **214**, 261
Wühl, H., see J. Metzger **214**, 371

Xiao-Guang, L., see S. Lei **214**, 133
Xue, Y.Y., see R.L. Meng **214**, 307

Yamauchi, H., see S. Adachi **214**, 313
Yamauchi, H., see J. Sugiyama **214**, 316
Yaron, U., see I. Felner **214**, 169
Yasuoka, H., see J. Sugiyama **214**, 316
Yi, H.R., see S. Lei **214**, 133
Yu, J.J., S. Massidda, A.J. Freeman and R. Podloucky, Electronic structure and properties of vacancy-ordered $YBa_2Cu_3O_{6.5}$ Chain versus plane Fermi surfaces in $YBa_2Cu_3O_{7-\delta}$ **214**, 335
Yuheng, Z., see S. Lei **214**, 133
Yunbo, J., see S. Lei **214**, 133

Zakharov, A.A., see A.V. Bazhenov **214**, 45
Zazunov, A.L., see V.A. Khlus **214**, 413
Zehnder, A., see S.P. Zhao **214**, 345
Zhang, H.B. and H. Sato, Structural stability of Bi-based cuprates **214**, 265
Zhang, Z.B., see W.L. Zhou **214**, 19
Zhao, S.P., F. Finkbeiner, Ph. Lerch, A. Jaggi, A. Zehnder and H.R. Ott, A $Nb/AlO_x/Nb$ trilayer process for the fabrication of X-ray detectors **214**, 345
Zhao, W., see W.L. Zhou **214**, 19
Zheng, D.N., see A. Porch **214**, 350
Zhokhov, A.A., see A.N. Maljuk **214**, 93
Zhou, G., see G.Y. Meng **214**, 297
Zhou, W.L., W. Zhao, K.K. Fung, L.Q. Chen and Z.B. Zhang, Microstructures of C_{60} textured thin film **214**, 19
Zver'kova, I.I., see A.N. Maljuk **214**, 93

Physica C 214 (1993) 439–440
North-Holland

PHYSICA C

Analytic Subject Index to Volume 214

1/*N*-expansion 385

2-D vortex 393

AC susceptibility 111, 277, 350, 371
Andreev reflection 413
Anisotropic superconductor 107, 175
Antiferromagnetic order 169, 316
Applications of high-T_c superconductors 9, 179

Band structure 73, 159
–of $Tl_{2-x-z}Ba_2Ca_{2+x}Cu_3O_{10-y}$ 153
Bose condensation 239, 377

Critical current density 9, 127, 187, 286, 403
Critical state model 111
Cu-deficiency 93
Cu–O chains 143, 335
Cu–O planes 37, 64, 119

Defect structures 19, 143, 247
Dimensional crossover
–in $Bi_2Sr_2CaCu_2O_{8+x}$ 175
Domain structure 247

EDX 80
Electrical resistivity 138, 195, 286, 359, 377, 393
Electric field effect 127
Electron diffraction 272
Electronic structure 119
–of $YBa_2Cu_3O_{7-\delta}$ 335
Electron–phonon coupling 335
Energy gap 73, 107, 385

Far-infrared spectra 45
Fermi surface 335
Fluctuation effects 350
Flux creep 9
Flux pinning 100, 111, 277, 403

Grain boundaries 127
Granular superconductivity 111

High-pressure effect 371
Hole concentration 64
HREM 19, 55, 307
Hydrogenation effect 138

Impurites 107
Internal friction 408
Ion implantation 127
Irradiation effect 1
Irreversibility line 100, 277
Isotope effect 73

Josephson effect 345, 365

Kondo effect 385

Lattice gas model 37
Lattice matching 133
Lattice parameters 1, 204, 261
Localization 359, 377

Magnetic impurity 385
Magnetic susceptibility 169
Magnetization 277, 403
Magnetoresistance 175
Mass spectroscopy 408
Meissner effect 313
Microstructure 9
Mixed solid precursor 297
MOCVD 297
Monte Carlo simulations 37
Mössbauer spectroscopy 169

Neutron diffraction 64, 204, 231
NMR 316
Non-ohmic behaviour 393
Normal-state properties
–of $La_{2-x}Sr_xCuO_4$ 377
Nucleation 272

Optical reflection 365
Optical spectroscopy 159
O–T transition 93
Oxygen diffusion 408
Oxygen ordering 1, 143, 371
–in $YBa_2Cu_3O_z$ 37
Oxygen stoichiometry 45, 80, 138, 182, 187, 261, 265, 291

Penetration depth 350
Phase diagram 231
Phase stability 291
Phonon spectrum 45
Photoemission spectroscopy 73, 153
Proximity effect 413

Reaction with water 179

Solid solubility
–in $Sm_{1+x}Ba_{2-x}Cu_3O_y$ 323
Specific heat
–of $PrBa_2NbCu_2O_8$ 169
Strong correlation 159
Structural phase transition 64
Structural stability 265
Structure
–of BiSrCaCuO 195
–of $Hg_{0.5}Bi_{0.5}Sr_{2-x}La_xCuO_{5-\delta}$ 87
–of $HgBa_2CaCu_2O_{6+\delta}$ 307
–of $La_{2-x}Ba_xCuO_4$ 64
–of $La_{2-x}Sr_xCu_{1-y}O_{4-\delta}$ 93
–of $LnBa_2Cu_3O_{7-\delta}$ (Ln = Er, Ho, Dy) 204
–of $LnBa_2Cu_4O_8$ (Ln = Er, Ho, Dy) 204
–of $Nd_2CuO_{3.8}F_{0.2}$ 316
–of $Sm_{1+x}Ba_{2-x}Cu_3O_y$ 323
–of $Tl_{0.5}Pb_{0.5}Sr_2CuO_y$ 182
–of Tl-2201 25
–of Tl-2212 25
–of Tl-2223 25
–of $Tl_2Ba_{2-x}La_xCuO_y$ 80
–of Tl–Ba–Ca–Cu–O 190
–of Y–Ba–Cu–O 55
Structure of C_{60} 19
Substitution effects 257
–in $Bi_2Sr_2Ca_{n-1}Cu_nO_{2n+4+\delta}$ 265
–in $(Tl,Pb)Sr_{1.6}Ba_{0.4}(Ca_{0.8}R_{0.2})Cu_2O_x$ 286
–in $YBa_2Cu_3O_{6+x}$ 143
–in $YBa_2Cu_3O_7$ 350
–in YBCO 426
Substitution of Ca and Co
–in $YSrBaCu_3O_{6+z}$ 277
Synthesis
–of Bi–Ba–Ln–Cu–O 291
–of BiSrCaCuO 195
–of $Hg_{0.5}Bi_{0.5}Sr_{2-x}La_xCuO_{5-\delta}$ 87
–of $HgBa_2CaCu_2O_{6+\delta}$ 307
–of Hg–Ba–Ca–Cu–O 313
–of $La_{2-x}Sr_xCu_{1-y}O_{4-\delta}$ 93
–of $La_{4-x}Ca_xBa_3Cu_7O_y$ 261

–of $Nb/Al_2O_3–Al/Nb$ 365
–of $Nb/AlO_x/Nb$ 345
–of $PrBa_2Cu_3O_{7-y}$ 231
–of $SmBa_2Cu_3O_y$ 323
–of Tl-2201 25
–of Tl-2212 25
–of Tl-2223 25
–of $W_{0.7}Ge_{0.3}$ 359
–of $YBa_2Cu_3O_{7-x}$ 272
–of $YBa_{2-x}Sr_xCu_3O_{7-\delta}$ 257
–of Y–Ba–Cu–O 55
TEM 247, 426
Thermoelectric effects
–in $SmBa_2Cu_3O_7$ 138
Thin film
–of $GdBa_2Cu_3O_{7-y}$ 133
–of $YBa_2Cu_3O_{7-\delta}$ 297
–of $YBa_2Cu_3O_x$ 393
Thin films 1, 19, 55, 127, 187, 190, 195, 257, 272, 323, 359
Tunneling 107, 413
Twin boundaries 19, 247, 426
Type-II superconductors 239
Vacancy-ordering 335
Vortex lattice 100
XAFS 119
XPS 153
X-ray detector 345
X-ray diffraction 1, 25, 133, 182, 190, 195, 307, 313